

Further research will be conducted to validate the safety, health, and work environment aspects considering the suitability between anthropometric measurements and workstation design after improvement has been carried out. Future research may also be conducted on the artificial piston assembly line to further investigate the ergonomic aspects of the workstation using different perspectives and methods.

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REFERENCES

- [1] Bimal Das, Julia Wimpee, Bijon Das, Ergonomic evaluation and redesign of a hospital meal cart, *Applied Ergonomics* 33,(2002), 309-318.
- [2] Chan, H.,Jiao,Y.,Development of an antropometric data base for Hongkong Chinese CAD operators., *Journal of Human Ergology* 25(1), (1996),38-43
- [3] Das B, Sengupta, Inustrial workstation design : A systematic ergomoic approach, *Applied Ergonomics*, (1996), 157-163.
- [4] Das B, Shikdar, Winters.T, Workstation redesign for repetitive drill press operation : a combined work design and ergonomics approach, *Human Factors in Manufacturing* 17, (2007), 395-410.
- [5] Hunting W, Grandjean E, Maeda K, Contrained postures in accounting machine operators, 1980, *Apllied Ergonomics* 11, 145-149.
- [6] Jinky Leilanie Del Prado Lu, Anthropomtetric Measurement of Filipino Manufacturing Workers, *International Journal od Industrial Ergonomics* 37(2007), 497-503.
- [7] Lin R.T, Chan C.C, Effectiveness of workstation design on reducing musculeskeletal risk factors and symptoms among semiconductor fabrication room workers, *International Jounal od Industrial Ergonomics* 37, (2007), 35-42.
- [8] McLeod.D, *The Ergonomics Edge : Improving Safety, Quality and Productivity*, John Willey, New York (1995).
- [9] Rungtai Lin , Yen Yu Kang, Ergomic Design of desk anf chair for primary school students in Taiwan, *International Journal of Innovation Management and Technology* 4 ,1 (2013).
- [10] Shikdar A, Das. B, Hall.R, Ergomoics and worker productivity : A Study with repetitive manufacturing task, *International Journal of industrial and Systems Engineering*, 2, 4 (1997), 336-374
- [11] T.K. Chuan, M. Hartono, and N. Kumar, *Anthropometry of the Singaporean and Indonesian populations*, *International Journal of Industrial Ergonomics*, 2010, pp. 757 – 766.
- [12] T. Yuri Zagloel, Inaki M Hakim, Syarafi Mukmin, Pre Elimanary Design Adjustable Workstation For piston assembly line considering anthropmetic for Indonesian People, *International Conference World Academia*, Bali (2015)

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